THE SOUTHWESTERN NATURALIST 35(4):481–499 DECEMBER 1990

INDEX TO VOLUME 35

Troy L. Best

Department of Zoology and Wildlife Science and
Alabama Agricultural Experiment Station,
331 Funchess Hall, Auburn University, Alabama 36849–5414

This index was constructed by listing each article alphabetically by the title and by the last name of the first author. Titles beginning with general terms or phrases (for example, a, an, the, observations on, notes on the) are listed by the next word in the title. Second and subsequent authors are listed with a reference to the first author. All taxa included in titles are listed, but family, genus, and species names are included each time they appeared in the abstracts, text, tables, and figure legends.

Abies, 308, 313
  durangensis, 366
Abronia
  matudai, 275
  ochoterenai, 275
Abundance, growth, and diet of channel catfish, *Ictalurus punctatus*, in the Green and Yampa rivers, Colorado and Utah, Harold M. Tyus and Neil J. Nikirk, 188–198
Abutilon
  californicum, 72
  parvulum, 67, 72
  sonorae, 72
Acacia, 231, 370
  angustissima, 72
  constricta, 72
  farnesiana, 349
  greggii, 64, 72
  millefolia, 64, 72
  smallii, 316–321
Acalypha
  lindheimeri, 71
  neomexicana, 67, 71
  radians, 388, 390
Acanthaceae, 70
Achnanthes
  exigua, 209
  linearis, 209
  minutissima, 209
Acourtia
  nana, 70
  thurberi, 70
  wrightii, 67, 70
Acris, 120
  crepitans, 474
Adelia vaseyi, 371
Adelphicos quadrivirgatus, 278
Adenostoma fasiculatum, 19
Adenostome fasciculatum, 316
Adiantaceae, 69
Adiantum capillus-veneris, 69
Aedes, 394, 400
Agavaceae, 64, 74
Agave
  lecheguilla, 366
  palmeri, 64, 74
  schottii, 64, 74
Age, growth, feeding, and behavior of Sacramento squawfish (*Ptychocheilus grandis*) in Bear Creek, Colusa Co., California, Larry R. Brown, 249–260
Agkistrodon
  bilineatus, 273, 278
  contortrix, 474
  piscivorus, 442, 474
Agnetina
  capitata, 132
  flavescens, 132
Agonostomus monticola, 34, 35, 37, 43, 46
Agosia chrysogaster, 179, 181, 185
Agropyron
  cristatum, 323
  intermedium, 323
Agrostis semiverticillata, 74
Aguilar-Morales, Marcela, see Sánchez-Hernández, Cornelio, —
Aimophila botterii, 348–349
Aizoaceae, 18, 70
Alces alces, 4
Aldon, Earl F., see Steinberger, Y., —
Algansea aphanea, 45
Algunos aspectos del comportamiento alimenticio del zarapito, *Catoptrophorus semipalmatus* (Scolopacidae), en la Ensenada de La Paz, Baja California Sur, México, Jorge Llinas Gutiérrez y José Manuel Galindo Jaramillo, 237–240
Allionia incarnata, 64, 73
Allium macropetalum, 74
Allodontichthys zonistius, 34, 36, 39, 46
Allotoca, 45
Alnus oblongifolis, 116
Aloysia wrightii, 67, 74
Alternanthera repens, 70
Amaranthaceae, 64, 70
Amaranthus, 394, 437
  albus, 70
  blitoides, 70
  graecizans, 70
  hybridus, 70
  palmeri, 70
Ambloplites, 346
  ariommus, 347
Amblyoma americanum, 111
Ambrosia, 437
  deltoidea, 330, 336
  dumosa, 336
  psilostachy, 159
  psilostachya, 18, 70, 387, 390, 436
Ambystoma
  barbouri, 99
  californiense, 217–220
  texanum, 99–100
  tigrinum, 179, 180, 219
Ambystomatidae, 99–100
Ameiurus melas, 179
Ameiva
  chaitzami, 274, 277
  undulata, 277
Amoreuxia palmatifida, 66, 71
Amorpha fruticosa, 66, 72
Amphispiza belli, 28–31
Amphora
  ovalis, 209
  veneta, 209
Amyris madrensis, 371
Anacardiaceae, 70
Anatomía e histológia de la cápsula del murciélago blanco *Diclidurus albus virgo* Thomas, Cornelio Sánchez-Hernández, Ma. de Lourdes Romero-Almaraz, y Marcela Aguilar-Morales, 241–244
Androlaelaps fahrenholzi, 111–113
Andropogon, 55, 434
  gerardii, 387, 390
  glomeratus, 436
  virginicus, 436
Androsace occidentalis, 73

Anemone tuberosa, 73
Angustipes ameghini, 94, 95
Anisacanthus thurberi, 66, 70
Anoda cristata, 66, 72
Anolis carolinensis, 474
Anomoeoneis
sphaerophora, 209
vitrea, 209
Antheraea polyphemus, 463–464
Antheraea polyphemus oculea (Lepidoptera: Saturniidae) from Coahuila, Mexico, new state record, Raymond W. Neck, 463–464
Anthericum torreyi, 67, 74
Antrozous pallidus, 232, 354
Anura, 358–361
Apateticus bracteatus, 21
Aphelacaris, 280, 282
Apiaceae, 18, 70
Apiomerus, 20
Aplodinotus grunniens, 406, 408
Apocynaceae, 64, 70
Apodanthera undulata, 71
Arabis perennans, 64, 71
Arbutus peninsularis, 76–79
Arcynopteryx compacta, 133
Arenaria lanuginosa, 71
Argemone pleiacantha, 73
Argythamnia neomexicana, 71
Aristida, 159, 386, 390
adscensionis, 64, 74
glabrata, 74
oligantha, 436
orcuttiana, 74
purpurea, 74
ternipes, 74
Aristolochia watsoni, 66, 70
Aristolochiaceae, 70
Armadillidium vulgare, 20
Arriaga, Laura, Ricardo Rodriquez-Estrella, and Alfredo Oretga-Rubio, Endemic hummingbirds and madrones of Baja: are they mutually dependent?, 76–79
Artemisia
campestris, 65, 70
dracunculus, 70
ludoviciana, 65, 70
nova, 323
pacifica, 70
tridentata, 279, 323
Artibeus
aztecus, 232
jamaicensis, 152, 154
toltecus, 232
Asclepiadaceae, 18, 70
Asclepias, 18, 63, 364
asperula, 65, 70
linaria, 70
macrotis, 70
nummularia, 65, 70
nyctaginifolia, 66, 70
quinquedentata, 66, 70
Aspleniaceae, 69
Aster, 434, 436, 437, 439
subulatus, 65, 70
Asteraceae, 18, 64, 70
Astragalus, 63
allochrous, 66, 72
arizonicus, 64, 72
humistratus, 72
mollissimus, 65, 72
nothoxys, 64, 72
nuttallianus, 64, 72
thurberi, 64, 72
Astyanax fasciatus, 34, 37, 38, 46
Atherinidae, 406
Atriplex
canescens, 11, 67, 71
elegans, 71
semibaccata, 18
Autumn spawning and other reproductive notes on loach minnow, a threatened cyprinid fish of the American Southwest, Stephen P. Vives and W. L. Minckley, 451–454
Avena fatua, 19, 28
Avicennia germinans, 237
Awaous transandeanus, 45
Ayala-Barajas, Ricardo, and Juan Carlos Morales, New species of *Hystrichopsylla* Tashenberg (Siphonaptera: Hystrichopsyllidae) from the state of Guerrero, México, 305–309

Baccarus, 116
Baccharis, 159, 181
brachyphylla, 70
glutinosa, 18, 64, 70
pilularis, 15, 18
pteronioides, 67, 70
salicifolia, 70
salicina, 434, 437, 438
sarothroides, 70
thesioides, 70
Bacillaria paradoxa, 209
Baetidae, 253
Bahia
absinthifolia, 65, 70
dissecta, 65, 70
Baileya multiradiata, 67, 70
Baiomys, 202, 310, 313
taylori, 158–162, 314
Baltosser, William H., and Troy L. Best, Seasonal occurrence and habitat utilization by lizards in southwestern New Mexico, 377–384
Basiliscus vittatus, 277
Bassariscus
astutus, 233, 344, 345
sonoitensis, 343–346
sumichrasti, 344
Bat species from the Kaibab Plateau, Arizona, with a new record of *Euderma maculatum*, seven, Howard J. Berna, 354–356
Beasley, Clark W., Tardigrada from Gunnison Co., Colorado, with the description of a new species of *Diphascon*, 302–304
Bebbia juncea, 70
Behria tenuiflora, 78
Benson, Karen L. P., see Conway, Dawn K., —
Berberidaceae, 64, 71
Berberis wilcoxii, 64, 71
Bergerocactus emoryi, 28
Berna, Howard J., Seven bat species from the Kaibab Plateau, Arizona, with a new record of *Euderma maculatum*, 354–356
Best, Troy L., see Baltosser, William H., —
Best, Troy L., see Thomas, Howard H., —
Bezy, Robert L., see Cortés, Rafael Aguilar, —
Bidens
aurea, 70
leptocephala, 70
Big brown bats (*Eptesicus fuscus*) from northwestern Texas, additional comments on, J. Knox Jones, Jr., and Richard W. Manning, 342–343
Bignoniaceae, 71
Biogeographic aspects of the herpetofauna of the Central Depression of Chiapas, México, with comments on surrounding areas, Jerry D. Johnson, 268–278
Biology of *Largus californicus* (Hemiptera: Largidae), Carey L. Booth, 15–22
Bipes, 271
Bison bison, 108
Blaesoxipha plintopyga, 216
Blarina, 199
brevicauda, 200
carolinensis, 200
hylophaga, 86, 200
Boa constrictor, 278
Boerhaavia
coccinea, 73
coulteri, 67, 73
erecta, 73
purpurascens, 73
scandens, 66, 73
Boleophthalmus boddarti, 338
Bommeria hispida, 67, 69
Bonham, C. D., see Orodho, Apollo B., —
Booth, Carey L., Biology of *Largus californicus* (Hemiptera: Largidae), 15–22
Boraginaceae, 64, 71
Bothriochloa, 434
barbinodis, 74
saccharoides, 436, 439
Bothrops
dunni, 271
godmani, 275
Bouteloua, 63

aristidoides, 64, 74
barbata, 74
chasei, 366
chondrosioides, 74
curtipendula, 74, 316–319, 413
eludens, 64, 74
eriopoda, 65, 74
gracilis, 65, 74, 279–282, 316–319
hirsuta, 67, 74, 390
parryi, 74
radicosa, 74
repens, 74
Bouvardia
glaberrima, 73
ternifolia, 73
Bowers, Janice E., see McLaughlin, Steven P., —
Bowles, John B., Paul D. Heideman, and Keith R. Erickson, Observations on six species of free-tailed bats (Molossidae) from Yucatan, Mexico, 151–157
Bowlesia incana, 64, 70
Brachiaria
arizonica, 74
ciliatissima, 390
Brachionus, 393, 398, 400
Bradypus variegatus, 206
Brassica rapa, 18
Brassicaceae, 18, 64, 71
Braun, Clait E., see White, J. Allen, —
Brickellia, 63
baccharidea, 66, 70
betonicaefolia, 64, 70
californica, 70
chlorolepis, 70
coulteri, 67, 70
floribunda, 64, 70
venosa, 64, 70
Britton Carlton, M., see McPherson, Guy R., —
Bromus
arizonicus, 74
ciliatus, 74
frondosus, 65, 74
inermis, 323
rubens, 74
unioloides, 436
Brown, Bryan T., Nesting common mergansers in Chihuahua, Mexico, 88–89
Brown, Larry R., Age, growth, feeding, and behavior of Sacramento squawfish (*Ptychocheilus grandis*) in Bear Creek, Colusa Co., California, 249–260
Buchloe dactyloides, 413
Bufo
bocourti, 275
canaliferus, 277
coccifer, 273, 274, 277
cognatus, 393, 399, 401
debilis, 399
marinus, 277
marmoreus, 277
microscaphus, 116, 118
punctatus, 116, 118
valliceps, 277
woodhousei, 116, 118, 474
woodhousii, 449
Bufonidae, 399
Bulbostylis capillaris, 74
Burrow characteristics of the nine-banded armadillo, *Dasypus novemcinctus*, John W. Zimmerman, 226–227
Bursey, Charles R., see Goldberg, Stephen R., —
Bush, J. K., see Van Auken, O. W., —
Bye, Robert, see Palomino H., Guadalupe, —

Cactaceae, 64, 71
Caesalpinia gilliesii, 72
Caire, William, see Thies, Monte, —
Calandrinia ciliata, 73
Call, C. A., see Skousen, J. G., —
Calliandra
eriophylla, 67, 72
humilis, 66, 72
peninsularis, 78
Callisaurus draconoides, 377–383
Calochortus
ambiguus, 66, 74
kennedyi, 74
Calycoseris wrightii, 64, 70
Calyptridium
monandrum, 64, 73
parryi, 73
Camarillo R., José L., see Cortés, Rafael Aguilar, —
Camissonia
californica, 64, 73
chamaenerioides, 64, 73
Campanulaceae, 71
Campbell, Jonathan A., and Ty M. Kubin, A key to the larvae of *Plectrohyla* (Hylidae), with a description of the tadpole presumed to be *Plectrohyla avia*, 91–94
Camper, Jeffrey D., Mode of reproduction in the smallmouth salamander, *Ambystoma texanum* (Ambystomatidae), in Iowa, 99–100
Canis latrans, 26, 101, 233
Capparidaceae, 71, 370–371
Capparis incana, 370–371
Capparis incana (Capparidaceae) in extreme southern Texas, additional records of, James H. Everitt, Fleet S. Lentz, and Lindley Lentz, 370–371
Capreolus capreolus, 4
Caprifoliaceae, 71
Caprobrotus, 15
Carassius auratus, 179, 206, 225
Cardinalis cardinalis, 466
Carex, 388, 390, 436
geophila, 66, 74
leucodonta, 74
ultra, 74
Carlowrightia arizonica, 70
Carminatia tenuiflora, 70
Carnegiea gigantea, 67, 71
Carnivora, 343–346
Carpenter, Len H., see Smith, Michael H., —
Carphochaete bigelovii, 66, 70
Carpiodes carpio, 406, 407
Carpobrotus, 18
Cary, John R., see Glazener, W. C., —
Carya mexicana, 366
Caryophyllaceae, 71
Cassia, 388, 390
Castilleja
bryantii, 78
integra, 73
lanata, 65, 73
sessiliflora, 65, 73
tenuiflora, 73
Cate, Rodney L., see Shipley, Michael M., —
Catoptrophorus semipalmatus, 237–240
Catostomidae, 34, 36, 38, 406
Catostomus
discobolus, 190, 427, 428
latipinnis, 190, 427, 428
occidentalis, 250, 253
Ceanothus greggii, 67, 73
Celastraceae, 71
Celtis
laevigata, 316–321
pallida, 74, 229, 371, 437
reticulata, 74, 80, 81
Cenchrus
ciliaris, 89, 349
incertus, 74
insertus, 390
Centaurea
melitensis, 18, 70
solstitialis, 18
Centaurium calycosum, 72
Centrarchidae, 346–348, 406
Centrarchus, 346
macropterus, 347
Centropomidae, 45
Centropomus, 45
Centurio senax, 152
Cerastium texanum, 71
Ceratophyllidae, 310–315
Cercidium
floridum, 72
microphyllum, 329, 330, 332–336
Cercocarpus montanus, 65, 73
Cervus
elaphus, 4, 362–363
nippon, 4
Chaetodipus
baileyi, 331
hispidus, 86, 111–114, 160, 201, 202
intermedius, 331, 335
nelsoni, 454–455
penicillatus, 331, 335, 457
Chamaecrista nictitans, 72

Chamaesaracha
conoides, 73
coronopus, 74
sordida, 74
Chamaesyce, 63
albomarginata, 64, 71
capitellata, 71
florida, 66, 71
hirta, 71
hyssopifolia, 66, 71
indivisa, 66, 72
pediculifera, 72
revoluta, 66, 72
serpyllifolia, 67, 72
serrula, 72
stictospora, 72
Chandlerella corophila, 458
Characidae, 34, 36, 38
Charadrius wilsonia, 240
Cheilanthes
eatoni, 69
feei, 65, 69
fendleri, 69
lindheimeri, 69
wrightii, 66, 69
Cheladonta micheneri, 111, 113
Chelonia mydas, 97
Chelydra serpentina, 474
Chenopodiaceae, 18, 71, 351–353
Chenopodium, 434, 437
album, 351–353, 436
ambrosioides, 351, 353
berlandieri, 351–353
fremontii, 71
graveolens, 351
murale, 351
neomexicanum, 71
Chilopsis linearis, 71, 381, 382
Chiococca alba, 371
Chionactis, 221
Chironomidae, 253
Chloris
cucullata, 390
virgata, 74
Chloroperlidae, 132
Chlorophyceae, 207
Chmura, Cynthia M., see Wygoda, Mark L., —
Choeronycteris mexicana, 78
Choisya arizonica, 64, 73
Chondrohierax uncinatus, 370
Chrysothamnus
depressus, 323
nauseosus, 67, 70
Cichlasoma istlanum, 34, 35, 43, 46
Cichlidae, 34, 35, 43, 406
Cirolanidae, 239
Cirsium
arizonicum, 66, 70
neomexicanum, 18, 70
nidulum, 18
occidentale, 18
ochrocentrum, 70
vulgare, 18
Citharexylum berlandieri, 371
Claassenia sabulosa, 130–134
Cladophora, 194
Claytonia perfoliata, 19
Clelia scytalina, 278
Clematis
drummondii, 73
ligusticifolia, 65, 73
Clioperla clio, 133
Cluepidae, 406
Clutch size and parasitism of the Texas spotted whiptail, *Cnemidophorus gularis* (Sauria: Teiidae), from south-central Texas, Michael R. Gannon and Kevin B. Willis, 215–217
Cnemidophorus
deppei, 277
gularis, 89–91, 215–217
guttatus, 277
laredoensis, 89–91
motaguae, 274, 277
sackii, 274
sexlineatus, 474, 475
tigris, 377–383
uniparens, 377–379
Cobb, Vincent A., Reproductive notes on the eggs and offspring of *Tantilla gracilis* (Serpentes: Colubridae), with evidence of communal nesting, 222–224
Cocconeis placentula, 209
Cochlospermaceae, 71
Codoma ornata, 453
Coendou mexicanus, 233
Cohen, Allen C., and Jacqueline L. Cohen, Ingestion of blister beetles by a Texas horned lizard, 369
Cohen, Jacquelin L., see Cohen, Allen C., —
Coleonyx elegans, 277
Colinus virginianus, 229–231
Colony size of the desert subterranean termite *Heterotermes aureus* (Isoptera: Rhinotermitidae), Susan C. Jones, 285–291
Coluber constrictor, 273, 278, 474
Colubridae, 115–122, 221–222, 222–224
Columba
fasciata, 82–84
leucocephala, 83
Comandra
pallida, 73
umbellata, 73
Commelina, 388, 390
dianthifolia, 74
erecta, 74
Commelinaceae, 74
Commicarpus scandens, 73
Condalia
lycioides, 381
obovata, 229
obtusifolia, 80, 81
warnockii, 73
Cone indehiscence in a peripheral population of piñon pines (*Pinus edulis*), M. Lisa Floyd and David D. Hanna, 146–150
Coniophanes
fissidens, 271
imperialis, 274, 278
piceivittis, 278
Conophis, 274
vittatus, 278
Contemporary plant communities of upland grasslands of the Coastal Sand Plain, Texas, David D. Diamond and Timothy E. Fulbright, 385–392
Contreras-Balderas, Armando J., see de la Garza, Fernando Montiel, —
Convolvulaceae, 64, 71
Convolvulus equitans, 71
Conway, Dawn K., and Karen L. P. Benson, A range extension for nesting Botteri's sparrow, *Aimophila botterii*, in southern Texas, 348–349
Conyza
canadensis, 70
coulteri, 70
sophiaefolia, 70
Cophosaurus texanus, 377–383
Coptotermes formosanus, 286–288
Cordes, James E., see Walker, James M., —
Cordylanthus laxiflorus, 64, 73
Coreocarpus arizonicus, 70
Corixidae, 253
Cornus drummondii, 437
Cortés, Rafael Aguilar, José L. Camarillo R., and Robert L. Bezy, Distribution, species status, and reproductive mode of the xantusiid lizard *Lepidophyma pajapanensis*, 373–374
Corydalis aurea, 73
Coryphantha vivipara, 65, 71
Corylophanes percarinatus, 275
Cosmos parviflorus, 70
Cottea pappopharoides, 66, 74
Cottidae, 453
Cottus, 195
Cowania mexicana, 65, 73
Cracca
caribaea, 66, 72
edwardsii, 72
Crassulaceae, 64, 71
Cratogeomys castanops, 108
Cricetidae, 159, 173–176, 202, 371–373
Crocodylus acutus, 278
Croptilon hirtellum, 387, 390
Crotalaria pumila, 66, 72
Crotalus
durissus, 278
pricei, 367–368
Croton, 387, 388, 390
capitatus, 436
pottsii, 65, 72
Cryptantha
angustifolia, 64, 71
barbigera, 64, 71

decipiens, 64, 71
micrantha, 64, 71
nevadensis, 64, 71
pterocarya, 64, 71
Cryptotis parva, 86, 200
Ctenosaura, 274
pectinata, 277
similis, 277
Cucurbita
digitata, 66, 71
foetidissima, 71
Cucurbitaceae, 71
Cupressaceae, 69
Cuscuta applanata, 71
Cymbalaris muralis, 423
Cymbella, 206, 208
cesatii, 209
cistula, 209
minuta, 209
tumida, 209
Cynara, 18
Cynodon, 434
dactylon, 74, 159, 316, 411–415, 436, 439
Cynomys ludovicianus, 107
Cyperaceae, 64, 74
Cyperus
aristatus, 66, 74
esculentus, 74
fendlerianus, 74
flavus, 74
huarmensis, 74
pringlei, 64, 74
rusbyi, 74
Cyprinella lutrensis, 406–408
Cyprinidae, 45, 211–215, 406, 446–448
Cyprinodon, 338–340
eximius, 446–448
pecosensis, 338, 339
Cyprinodontidae, 338–340, 446–448
Cyprinus carpio, 87, 190, 406
Cytogenetic distinction between *Teloxys* and *Chenopodium* (Chenopodiaceae), Guadalupe Palomino H., Myrna Segura D., Robert Bye, and Pedro Mercado R., 351–353

Dalea, 63
albiflora, 64, 72
brachystachys, 65, 72
candida, 65, 72
formosa, 65, 72
grayi, 72
lachnostachys, 72
nana, 65, 72
neomexicana, 72
pogonathera, 72
pringlei, 66, 72
versicolor, 66, 72
wrightii, 65, 72
Dalquest, Walter W., Frederick B. Stangl, Jr., and M. John Kocurko, Zoogeographic implications of Holocene mammal remains from ancient beaver ponds in Oklahoma and New Mexico, 105–110
Dama dama, 4
Dasylirion wheeleri, 66, 74
Dasypus novemcinctus, 226–227, 473
Datura
meteloides, 74
wrightii, 74
Daucus
carota, 18, 436
pusillus, 67, 70
Dayton, Arthur D., see Shuman, Theresa W., —
de la Garza, Fernando Montiel, and Armando J. Contreras-Balderas, First hook-billed kite specimen from Nuevo Leon, Mexico, 370
Delphinium scaposum, 65, 73
Demographic analysis of a Rio Grande turkey population, W. C. Glazener, Dean Ransom, Jr., John R. Cary, and Orrin J. Rongstad, 23–27
Dendrobates auratus, 361
Denticula elegans, 209
Dermophis mexicanus, 277
Descurainia pinnata, 71
Desmanthus
cooleyi, 72
virgatus, 436
Desmidiaceae, 207
Desmodium
batocaulon, 72
cinerascens, 72
neomexicanum, 72
procumbens, 72
rosei, 72
Desmodus rotundus, 152, 154
Desmognathus
brimleyorum, 468, 469, 471
fuscus, 469, 471
ochrophaeus, 469
santeetlah, 469, 471
Destruction of harvester ant colonies by invading fire ants in south-central Texas (Hymenoptera: Formicidae), Allan W. Hook and Sanford D. Porter, 477–478
Diadophis punctatus, 474
Diamond, David D., and Timothy E. Fulbright, Contemporary plant communities of upland grasslands of the Coastal Sand Plain, Texas, 385–392
Dichanthelium, 386, 388, 390, 434, 437
oligosanthes, 435, 436, 438
Dichelostemma pulchellum, 64, 74
Dickerman, Robert W., The scaled antpitta, *Grallaria guatimalensis*, in Mexico, 460–463
Dickson, James G., see Rudolph, D. Craig, —
Diclidurus albus, 241–244
Dicliptera resupinata, 70
Differential freeze-related mortality in feral populations of introduced veronicellid slugs in extreme southern Texas, Raymond W. Neck, 94–95
Digitaria
californica, 74
cognatum, 74
sanguinalis, 74
Diodia teres, 66, 73
Dionda
argentosa, 448
diaboli, 350, 446–448
episcopa, 448
Dioryctria, 148
Diospyros texana, 349
Diphascon, 302–304
craigi, 303, 304
iltisi, 303
oculatum, 303
punctatum, 304
recamieri, 303
scoticum, 302, 303
spitzbergense, 303
Diphylla ecaudata, 152
Diplachne dubia, 74
Dipodomys, 58, 336
elator, 111–114, 356–358
merriami, 111, 113, 332, 335, 457
ordii, 366, 457
phillipsii, 111–113
spectabilis, 112
Distichlis spicata, 349
Distribucion espacial en arbustos de desierto: el caso de *Fouquieria splendens*, Alain M. Walkowiak, Mario Salazar, y Elena Solana, 363–365
Distribution of the headwater catfish *Ictalurus lupus* (Osteichthyes: Ictaluridae), Steven W. Kelsch and Fred S. Hendricks, 292–297
Distribution, species status, and reproductive mode of the xantusiid lizard *Lepidophyma pajapanensis*, Rafael Aguilar Cortés, José L. Camarillo R., and Robert L. Bezy, 373–374
Diura bicaudata, 133
Dormitator latifrons, 45
Dorosoma cepedianum, 406–408
Doryphoribius doryphorus, 303
Draba
cuneifolia, 71
petrophila, 64, 71
Dryadophis melanolomus, 278
Drymarchon corais, 278
Drymaria molluginea, 71
Drymobius margaritiferus, 278
Dryopetalon runcinatum, 71
Dyschoriste decumbens, 70
Dyssodia
acerosa, 65, 70
pentachaeta, 65, 70
Dysticulus, 250
Dytiscidae, 253

Echelle, Alice F., see Echelle, Anthony A., —
Echelle, Anthony A., Alice F. Echelle, and D. Allen Rutherford, Polygonal breeding territories in a natural population (Pisces: Cyprinodontidae: *Cyprinodon*), 338–340
Echeneis, 206
Echiniscus
bisetosus, 302
blumi, 302, 303
canadensis, 303
granulatus, 302
wendti, 302, 303
Echinocereus
fendleri, 67, 71
pectinatus, 71
triglochidiatus, 65, 71
Echinonyssus
incomptis, 111–113
perognathi, 111–113
Echinopepon wrightii, 71
Ectoparasites of *Dipodomys elator* from north-central Texas with some data from sympatric *Chaetodipus hispidus* and *Perognathus flavus*, Howard H. Thomas, John O. Whitaker, Jr., and Troy L. Best, 111–114
Eggs, larvae, and early juveniles of the stripped darter, *Etheostoma punctulatum* (Agassiz), from a tributary of the Osage River, Missouri, description of, Thomas P. Simon and Nancy J. Garcia, 123–129
Eggshell thinning and contaminant levels in bald eagle eggs from Arizona, 1977 to 1985, Teryl G. Grubb, Stanley N. Wiemeyer, and Lloyd F. Kiff, 298–301
Eichhornia crassipes, 206
Elaphe obsoleta, 474
Elassoma zonatum, 346, 347
Elassomatidae, 346
Eleotridae, 45
Eleotris picta, 45
Eleutherodactylus
coqui, 359, 361
rhodopis, 277
rugulosus, 277
Elionurus barbiculmis, 74
Elk populations within Guadalupe Mountains National Park, Texas, continued decline of, Susan McAlpine, 362–363
Elymus canadensis, 85
Elyonurus tripsacoides, 388, 390
Emballonuridae, 241
Encephalitis, 26
Endemic hummingbirds and madrones of Baja: are they mutually dependent?, Laura Arriaga, Ricardo Rodriquez-Estrella, and Alfredo Oretga-Rubio, 76–79
Enneapogon desvauxii, 74
Entomoneis, 209
Enulius flavitorques, 274, 278
Ephedra
antisiphilitica, 80, 81
trifurca, 69
Ephedraceae, 69
Epilobium
canum, 73
ciliatum, 73
Epizoic communities on the parasitic copepod *Lernaea carassii* (Lernaeidae), occurrence of, Kirk O. Winemiller and Barbara M. Winsborough, 206–210
Eptesicus
furinalis, 152
fuscus, 232, 342–343, 354, 355
Equisetaceae, 69
Equisetum, 194
laevigatum, 69
Equus conversidens, 107
Eragrostis, 436
chloromelas, 74
cilianensis, 74
intermedia, 74
lehmanniana, 74
mexicana, 74
pectinacea, 74
secundiflora, 390
superba, 74
Eriastrum diffusum, 64, 73
Ericaceae, 76
Ericameria laricifolia, 66, 70
Erickson, Keith R., see Bowles, John B., —
Erigeron, 436
divergens, 67, 70
flagellaris, 65, 70
neomexicanus, 70
Erigonium multiflorum, 388
Eriochloa
lemmoni, 74
lemmonii, 66
Eriogonium multiflorum, 390
Eriogonum
abertianum, 73
arborescens, 19
deflexum, 64, 73
giganteum, 19
polycladon, 73
thurberi, 64, 73
wrightii, 64, 73
Erioneuron
avenaceum, 74
pulchellum, 64, 74
Erodium cicutarium, 72
Erysimum asperum, 67, 71
Erythrina flabelliformis, 66, 72
Eschscholzia californica, 73
Etheostoma
boschungi, 123
collettei, 135–145
cragini, 123, 128
grahami, 446
microperca, 128
pallididorsum, 123
punctulatum, 123–129
radiosum, 143
spectabile, 128, 144
trisella, 123, 128
whipplei, 135–145
Eucalyptus globulus, 19
Eucinostomus, 239
Eucrypta micrantha, 64, 72
Euderma maculatum, 233, 354–456
Eulimnadia texana, 393–395, 400
Eumacronychia
nigricornis, 97, 98
sternalis, 97
Eumeces
fasciatus, 473, 474
laticeps, 474
Eumops
bonariensis, 151–153, 157
glaucinus, 151–154, 157
Eupatorium, 436
betonicifolium, 390
betonisifolium, 387
greggii, 70
herbaceum, 70
Euphorbia
exstipulata, 72
spathulata, 72
Euphorbiaceae, 64, 69, 71
Eurotia lanata, 11
Eurycea quadridigitata, 474
Euryophthalmus cinctus, 20
Euschoengastia decipiens, 111–113
Eustrongylides, 185
Evax multicaulis, 70
Everitt, James H., Fleet S. Lentz, and Lindley Lentz, Additional records of *Capparis incana* (Capparidaceae) in extreme southern Texas, 370–371
Evolvulus
arizonicus, 64, 71
pilosus, 71
sericeus, 67, 71
Eysenhardtia orthocarpa, 66, 72

Fabaceae, 18, 64, 72
Fagaceae, 18, 72
Fagus grandifolia, 472
Fahrenholzia
pinnata, 111–113
zacatecae, 111–113
Falco peregrinus, 300
Farancia, 442
Felis
concolor, 234
domesticus, 30
weidii, 234
Fendlera rupicola, 73
Ferocactus wislizenii, 66, 71
Festuca, 316, 464
Ficimia publia, 278
Ficus carica, 73
Filago californica, 70

Filaria mitchelli, 458
Fimbristylis, 388, 390
Fire ant (*Solenopsis invicta*) density on northern pygmy mice (*Baiomys taylori*), impact of, Tracy S. Smith, Steven A. Smith, and David J. Schmidly, 158–162
Fishes of Crutcho Creek and the North Canadian River in central Oklahoma: effects of urbanization, William J. Matthews and Frances P. Gelwick, 403–410
Fishes of the Sierra de Manantlan, west-central Mexico, John Lyons and Sonia Navarro-Perez, 32–46
Floristic analysis and checklist for the northern Santa Rita Mountains, Pima Co., Arizona, a, Steven P. McLaughlin, and Janice E. Bowers, 61–75
Flourensia cernua, 378, 380, 381
Floyd, M. Lisa, and David D. Hanna, Cone indehiscence in a peripheral population of piñon pines (*Pinus edulis*), 146–150
Foeniculum vulgare, 18
Forelius foetidus, 416–421
Formicidae, 416–422, 477–478
Fouquieria splendens, 72, 363–365
Fouquieriaceae, 72
Fragilaria brevistriata, 207, 209
Fraxinus
  pennsylvanica, 73
  pennsylvanicus, 116
  velutina, 73
Fraze, Russell, K., and Kenneth T. Wilkins, Patterns of use of man-made roosts by *Tadarida brasiliensis mexicana* in Texas, 261–267
Free-tailed bats (Molossidae) from Yucatan, Mexico, observations on six species of, John B. Bowles, Paul D. Heideman, and Keith R. Erickson, 151–157
Freeman, C. Edward, and Kathleen C. Head, Temperature and sucrose composition of floral nectars in *Ipomopsis longiflora* under field conditions, 423–426
Frey, Jennifer K., and Dwight W. Moore, Status of Hayden's shrew (*Sorex haydeni*) in Kansas, 84–86
Frisonia picticeps, 133
Froelichia arizonica, 66, 70
Frost, Thomas M., see MacKay, William P., —
Fulbright, Timothy E., see Diamond, David D., —
Fundulidae, 406
Fundulus zebrinus, 406

Gaillardia
  aestivalis, 386, 387, 390
  pinnatifida, 70
Galactia
  canescens, 388–390
  wrightii, 66, 72
Galictis vittata, 234
Galium
  aparine, 73
  microphyllum, 73
  proliferum, 73
  wrightii, 66, 73
Gambelia wislizenii, 377–383
Gambusia
  affinis, 178, 206, 207, 406–408
  amistadensis, 446
  geiseri, 350
  senilis, 350, 446
Gannon, Michael R., and Kevin B. Willis, Clutch size and parasitism of the Texas spotted whiptail, *Cnemidophorus gularis* (Sauria: Teiidae), from south-central Texas, 215–217
Garcia, Nancy J., see Simon, Thomas P., —
Garrett, Gary P., see Hubbs, Clark, —
Garrott, Robert A., see Smith, Michael H., —
Garrya wrightii, 67, 72
Garryaceae, 72
Gastrophryne
  carolinensis, 474
  usta, 277
Gaura
  coccinea, 73
  hexandra, 73
  parviflora, 65, 73
Gehyra mutilata, 271
Gelwick, Frances P., see Matthews, William J., —
rNote: The change to pitch (12) and font (1) must be converted manually.rGenetic characteristics of Colorado mule deer (*Odocoileus hemionus*) and comparisons with other cervids, Michael H. Smith, Kim T. Scribner, Len H. Carpenter, and Robert A. Garrott, 1–8
Genetic differentiation among populations of two species of mice (*Peromyscus*), a comparison of, Janice E. Schnake-Greene, Lynn W. Robbins, and Deanna K. Tolliver, 54–60
Gentianaceae, 72
Geographic distribution of the cytotypes of *Chaetodipus nelsoni canescens* (Rodentia: Heteromyidae), Thomas E. Lee, Jr., 454–455
Geomyidae, 201
Geomylichus
  dipodomius, 111–113
  inaequalis, 111–113
  perognathi, 112
  perognathus, 111
  texensis, 111, 113
Geomys, 199
  bursarius, 108, 201
George, Sarah B., Unusual records of shrews in New Mexico, 464–465
Geraniaceae, 72
Gerrhonotus liocephalus, 273–275, 277
Gese, Eric M., Reproductive activity in an old-age coyote in southeastern Colorado, 101–102
Gila
  cypha, 196
  ditaenia, 177–187
  purpurea, 177, 178, 185, 186
Gilia mexicana, 66, 73
Glandularia
  bipinnatifida, 74
  gooddingii, 74
Glazener, W. C., Dean Ransom, Jr., John R. Cary, and Orrin J. Rongstad, Demographic analysis of a Rio Grande turkey population, 23–27
Glossophaga soricina, 152, 154
Glycine max, 423
Gnaphalium
  chilense, 70
  leucocephalum, 65, 70
  wrightii, 70
Gobiidae, 34, 43, 45
Gobiomorus
  maculatus, 45
  polylepis, 45
Gold, John R., and Patricia K. Zoch, Intraspecific variation in chromosomal nucleolus organizer regions in *Notropis chrysocephalus* (Pisces: Cyprinidae), 211–215
Goldberg, Stephen R., and Charles R. Bursey, Redescription of the microfilaria *Piratuba mitchelli* (Smith) (Onchocercidae) from the Gila monster, *Heloderma suspectum* Cope (Helodermatidae), 458–460
Gomphonema, 208
  intricatum, 209
  olivaceum, 206, 209
  parvulum, 206, 209
  subclavatum, 206, 209
  truncatulum, 209
Gomphrena
  caespitosa, 64, 70
  nitida, 70
  sonorae, 70
Goodeidae, 34, 35, 39, 40, 45
Gopherus, 442
Gossypium thurberi, 64, 72
Grallaria
  guatimalensis, 460–463
  mexicana, 460, 461
  ochraceiventris, 461
Graptopetalum
  bartrami, 64
  bartramii, 71
Grass density and time of planting on *Prosopis glandulosa* seedling growth,

importance of, O. W. Van Auken and J. K. Bush, 411–415
Grimes, John V., see Stangl, Frederick B., Jr., —
Growth and voltinism of five stonefly species in a New Mexico mountain stream, Rodney L. Hassage and Kenneth W. Stewart, 130–134
Growth of young band-tailed pigeons in captivity, J. Allen White and Clait E. Braun, 82–84
Grubb, Teryl G., Stanley N. Wiemeyer, and Lloyd F. Kiff, Eggshell thinning and contaminant levels in bald eagle eggs from Arizona, 1977 to 1985, 298–301
Gryon largi, 20
Guardiola platyphylla, 70
Guilleminea densa, 70
Gumbart, Thomas C., and Kimberly A. Sullivan, Predation on yellow-eyed junco nestlings by twin-spotted rattlesnakes, 367–368
Gunning, Gerald E., and Royal D. Suttkus, Species dominance in two river populations of sunfishes (Pisces: Centrarchidae): 1966 to 1988, 346–348
Guthery, Fred S., see Johnson, David B., —
Gutiérrez, Jorge Llinas, y José Manuel Galindo Jaramillo, Algunos aspectos del comportamiento alimenticio del zarapito, *Catoptrophorus semipalmatus* (Scolopacidae), en la Ensenada de La Paz, Baja California Sur, México, 237–240
Gutierrezia
microcephala, 64, 70
sarothrae, 65, 70, 373, 380, 381
Gymnophthalmus speciosus, 274, 277, 278
Gymnorhinus cyanocephalus, 149
Gymnosperma glutinosum, 65, 70

Habitat use and predatory behavior of *Thamnophis cyrtopsis* (Serpentes: Colubridae) in a seasonally variable aquatic environment, K. Bruce Jones, 115–122
Haemulidae, 45
Haliaeetus leucocephalus, 89, 298–301
Halimeda, 239
Hanna, David D., see Floyd, M. Lisa, —
Haploperla brevis, 132
Haplophyton crooksii, 66, 70
Harris, Arthur H., Taxonomic status of the Pleistocene ringtail *Bassariscus sonoitensis* (Carnivora), 343–346
Hassage, Rodney L., and Kenneth W. Stewart, Growth and voltinism of five stonefly species in a New Mexico mountain stream, 130–134
Hayden's shrew (*Sorex haydeni*) in Kansas, status of, Jennifer K. Frey and Dwight W. Moore, 84–86
Hayes, Marc P., see Holland, Dan C., —
Hayes-Odum, Louise A., Observations on reproduction and embryonic development in *Syrrhophus cystignathoides campi* (Anura: Leptodactylidae), 358–361
Head, Kathleen C., see Freeman, C. Edward, —
Heath, Darrell R., see Saugey, David A., —
Hedeoma
dentatum, 64, 72
hyssopifolium, 66, 72
nanum, 67, 72
Hedyotis
pygmaea, 73
rubra, 65, 73
Heideman, Paul D., see Bowles, John B., —
Heidt, Gary A., see Saugey, David A., —
Heidt, Gary A., see Sugg, Derrick W., —
Helenium thurberi, 70
Helianthus, 394, 436
annuus, 466
maximiliani, 466
petiolaris, 70
Heliotropium fruticosum, 71
Heloderma
horridum, 278
suspectum, 458–460
Helodermatidae, 458–460
Hemidactylus
frenatus, 271
turcicus, 271
Hemigrapsus oregonensis, 240
Hemiptera, 15–22
Hendricks, Fred S., see Kelsch, Steven W., —
Hendrickson, Dean A., y Lourdes Juárez Romero, Los peces de la Cuenca del Río de la Concepción, Sonora, México, y el estatus del charalito Sonorense, *Gila ditaenia*, una especie en amenaza de extinción, 177–187
Heske, Edward J., Why do horse lubbers roost in the bushes?, 455–458
Heterodon platyrhinos, 474
Heteromyidae, 201, 356–358, 454–455
Heteropogon contortus, 74
Heterosperma pinnatum, 70
Heterotermes aureus, 285–291
Heterotheca
pilosa, 436
psammophila, 70
subaxillaris, 385–388, 390
viscida, 70
Heuchera sanguinea, 66, 73
Hexalectris spicata, 66, 74
Hibernating Indiana bats (*Myotis sodalis*) from the Ouachita Mountains of southeastern Oklahoma, David A. Saugey, Gary A. Heidt, Darrell R. Heath, and V. Rick McDaniel, 341–342
Hibiscus
coulteri, 66, 72
denudatus, 72
Hilaria
belangeri, 74
mutica, 74, 235
Holland, Dan C., Marc P. Hayes, and Eben McMillan, Late summer movement and mass mortality in the California tiger salamander (*Ambystoma californiense*), 217–220
Hood, Craig S., see Shipley, Michael M., —
Hook, Allan W., and Sanford D. Porter, Destruction of harvester ant colonies by invading fire ants in south-central Texas (Hymenoptera: Formicidae), 477–478
Hook-billed kite specimen from Nuevo Leon, Mexico, first, Fernando Montiel de la Garza and Armando J. Contreras-Balderas, 370
Hordeum, 19
jubatum, 28
murinum, 74
Horse lubbers roost in the bushes?, why do, Edward J. Heske, 455–458
Hubbs, Clark, and Gary P. Garrett, Reestablishment of *Cyprinodon eximius* (Cyprinodontidae) and status of *Dionda diaboli* (Cyprinidae) in the vicinity of Dolan Creek, Val Verde Co., Texas, 446–448
Hybanthus verticillatus, 74
Hybognathus, 211
hankinsoni, 87
placitus, 406
Hydrophilidae, 253
Hydrophyllaceae, 64, 72
Hydropsychidae, 253
Hyla
arenicolor, 116–118
chrysoscelis, 474
cinerea, 474
robertmertensi, 277
sumichrasti, 274, 277
versicolor, 474
Hylidae, 91–94
Hylocharis xantusii, 76–79
Hymenoclea monogyra, 70
Hymenopappus filifolius, 65, 70
Hymenoptera, 416–422, 477–478
Hymenothrix
wislizenii, 64, 70
wrightii, 70
Hymenoxis, 394
Hypericaceae, 18
Hypericum perforatum, 18
Hyponeocula montanensis, 111, 113

Hypopachus
championi, 274
variolosus, 274, 277
Hypsibius
convergens, 303, 304
dujardini, 303
macrocalcaratus, 303
oberhaeuseri, 302
pallidus, 302
scabropygus, 303
Hystrichopsylla, 305–309
dippiei, 305
kris, 305
llorentei, 305–308
orophila, 305, 308
Hystrichopsylla Tashenberg (Siphonaptera: Hystrichopsyllidae) from the state of Guerrero, México, new species of, Ricardo Ayala-Barajas and Juan Carlos Morales, 305–309
Hystrichopsyllidae, 305–309

Ictaluridae, 34, 36, 38, 292–297, 406, 453
Ictalurus
dugesi, 34, 37, 38, 46
lupus, 292–297, 446
melas, 406
punctatus, 179, 188–198, 292–297, 406, 407
Ictiobus
bubalus, 406
cyprinellus, 406
Idionycteris phyllotis, 232, 354
Iguana iguana, 278
Iguanidae, 97–98
Ilex vomitoria, 435, 437
Ilyodon
furcidens, 34, 35, 37–39, 42, 46
xantusi, 39
Imantodes gemmistratus, 274, 278
Immunoelectrophoretic relationships among four species of woodrats (Cricetidae: *Neotoma*), Michael M. Shipley, Frederick B. Stangl, Jr., Rodney L. Cate, and Craig S. Hood, 173–176
Indigofera sphaerocarpa, 72
Influence of handling time and metabolizable energy on seed selection by four emberizids, Theresa W. Shuman, Robert J. Robel, John L. Zimmerman, and Arthur D. Dayton, 466–468
Ingestion of blister beetles by a Texas horned lizard, Allen C. Cohen and Jacqueline L. Cohen, 369
Interaction of two C⅜ and C½ grasses with seedlings of *Acacia smallii* and *Celtis laevigata*, O. W. Van Auken and J. K. Bush, 316–321
Intraspecific variation in chromosomal nucleolus organizer regions in *Notropis chrysocephalus* (Pisces: Cyprinidae), John R. Gold and Patricia K. Zoch, 211–215
Ipomoea, 63
barbatisepala, 66, 71
capillacea, 71
coccinea, 66, 71
costellata, 71
hederacea, 71
leptotoma, 71
muricata, 71
Ipomopsis
longiflora, 73, 423–426
multiflora, 66, 73
thurberi, 64, 73
Isocoma tenuisecta, 66, 70
Isohypsibius
granulifer, 302
tuberculatus, 302
Isoperla fulva, 130–134
Isoptera, 285–291
Isotomidae, 280
Itaquascon ramazzottii, 303
Iva ambrosiaefolia, 65, 70
Ixodes, 112, 113
Ixodidae, 113

Jaltomata procumbens, 66, 74
Janusia gracilis, 66, 72
Jaramillo, José Manuel Galindo, see Gutiérrez, Jorge Llinas, —
Jatropha macrorhiza, 72
Jellisonia, 310–315
bonia, 310, 314
bullisi, 310, 313, 314
dybasi, 310, 314
grayi, 310, 314
guerrerensis, 311–314
hayesi, 310, 314
ironsi, 310, 313, 314
johnsonae, 310, 314
klotsi, 310–312, 314
wisemani, 310, 313
Jellisonia Traub, 1944 (Siphonaptera: Ceratophyllidae) from Guerrero, México, description of a new species of, Juan Carlos Morales, 310–315
Johnson, David B., Fred S. Guthery, and Arlo H. Kane, Attributes of whistling posts used by northern bobwhites (*Colinus virginianus*), 229–231
Johnson, Jerry D., Biogeographic aspects of the herpetofauna of the Central Depression of Chiapas, México, with comments on surrounding areas, 268–278
Jones, J. Knox, Jr., and Richard W. Manning, Additional comments on big brown bats (*Eptesicus fuscus*) from northwestern Texas, 342–343
Jones, K. Bruce, Habitat use and predatory behavior of *Thamnophis cyrtopsis* (Serpentes: Colubridae) in a seasonally variable aquatic environment, 115–122
Jones, Stanley, R., and Sherman A. Phillips, Jr., Resource collecting abilities of *Solenopsis invicta* (Hymenoptera: Formicidae) compared with those of three sympatric Texas ants, 416–422
Jones, Susan C., Colony size of the desert subterranean termite *Heterotermes aureus* (Isoptera: Rhinotermitidae), 285–291
Joshuella, 280–282
Juglandaceae, 72
Juglans
major, 72, 116
mollis, 366
Juncaceae, 74
Junco
hyemalis, 466
phaeonotus, 367–368
Juncus
bufonius, 64, 74
ensifolius, 74
interior, 74
torreyi, 74
Juniperus, 55, 233, 281
deppeana, 66, 69
mexicana, 199
monosperma, 70, 279, 322
osteosperma, 322–328
virginiana, 435, 437

Kallstroemia
californica, 74
grandiflora, 74
parviflora, 74
Kallstromia, 369
Kane, Arlo H., see Johnson, David B., —
Karlin, Alvan A., and John D. Rickett, Microgeographic genetic variation in creole (*Etheostoma collettei*) and redfin (*Etheostoma whipplei*) darters (Percidae) in central Arkansas, 135–145
Karp, Catherine A., see Tyus, Harold M., —
Karwinskia humboldtiana, 371
Kelsch, Steven W., and Fred S. Hendricks, Distribution of the headwater catfish *Ictalurus lupus* (Osteichthyes: Ictaluridae), 292–297
Kennedy, Michael L., see Sugg, Derrick W., —
Key to the larvae of *Plectrohyla* (Hylidae), with a description of the tadpole presumed to be *Plectrohyla avia*, a, Johathan A. Campbell and Ty M. Kubin, 91–94
Kiff, Lloyd F., see Grubb, Teryl G., —
King, Timothy L., see Ward, Rocky, —
Kinosternon
alamose, 228
flavescens, 228

hirtipes, 228
integrum, 228
scorpioides, 274, 278
sonoriense, 228
Knight, R. W., see Skousen, J. G., —
Kocurko, M. John, see Dalquest, Walter W., —
Koeberlinia spinosa, 381
Koeleria nitida, 74
Krameria
glandulosa, 72
grayi, 331
lanceolata, 72
parvifolia, 72
Krameriaceae, 72
Kubin, Ty M., see Campbell, Jonathan A., —

Lactuca serriola, 70
Laelaptidae, 113
Laemanctus serratus, 278
Laevicaulis alte, 94, 95
Laguncularia racemosa, 237
Lamiaceae, 18, 64, 72
Lamium amplexicaule, 72
Lampropeltis
calligaster, 474
pyromelana, 368
triangulum, 278
Lanius ludovicianus, 30
Lapidium virginicum, 71
Lappula redowskii, 65, 71
Largidae, 15–22
Largus californicus, 15–22
Larrea, 231
tridentata, 74, 330, 331, 356, 364, 366, 377, 380, 381
Lasionycteris noctivagens, 354, 355
Lasiurus
cinereus, 232, 354, 355
ega, 152
intermedius, 152, 154
xanthinus, 232
Lasthenia californica, 67, 70
Lauxaniidae, 239
Lavinia symmetricus, 250, 253
Lee, Thomas E., Jr., Geographic distribution of the cytotypes of *Chaetodipus nelsoni canescens* (Rodentia: Heteromyidae), 454–455
Lentz, Fleet S., see Everitt, James H., —
Lentz, Lindley, see Everitt, James H., —
León-Paniagua, Livia, Esther Romo-Vázquez, Juan Carlos Morales, David J. Schmidly, and Daniel Navarro-López, Noteworthy records of mammals from the state of Querétaro, Mexico, 231–234
Lepechinia hastata, 78
Lepidium
densiflorum, 436
lasiocarpum, 64, 71
thurberi, 64, 71
Lepidophyma
flavimaculatum, 374
pajapanensis, 373–374
sylvaticum, 373, 374
tuxtlae, 374
Lepidoptera, 463–464
Lepidospartum squamatum, 18
Lepisosteus
oculatus, 225
platyrhinchus, 225
Lepomis
cyanellus, 87, 178, 179, 185, 250, 347, 406, 407
gibbosus, 87
gulosus, 347, 406
humilis, 347, 406
macrochirus, 87, 179, 250, 347, 406
marginatus, 347
megalotis, 346, 347, 406, 408
microlophus, 347
punctatus, 347, 349–351
symmetricus, 346
Leporidae, 200
Leptodactylidae, 358–361
Leptodactylus
fragilis, 277
melanonotus, 277
Leptodeira
annulata, 274, 278
nigrofasciata, 274, 278
rhombifera, 274
septentrionalis, 274, 278
Leptoloma cognatum, 74
Leptonycteris sanborni, 78, 232
Leptophis
diplotropis, 278
mexicanus, 275
Leptotyphlops goudotii, 278
Lepus, 236
californicus, 200, 201
Lernaea carassii, 206–210
Lernaeidae, 206–210
Lespedeza virginica, 436
Lesquerella
gordoni, 66, 71
purpurea, 65, 71
Leucelene ericoides, 65, 70
Liatris, 436
Liliaceae, 74
Limosa fedoa, 240
Linaceae, 72
Linanthus
aureus, 64, 73
bigelovii, 64, 73
Linaria texana, 73
Linum
lewisii, 72
puberulum, 65, 72
Liquidambar styraciflua, 472
Listrophoridae, 113
Lithospermum
cobrense, 65, 71
incisum, 65, 71
Loasaceae, 72
Lobelia
cardinalis, 71
laxiflora, 78
Loeflingia squarrosa, 71
Logperches (*Percina caprodes* and *Percina macrolepida*) in Colorado, reports and verified occurrence of, Steven P. Platania, 87–88
Lolium
perenne, 316–319
temulentum, 316–319
Lomatium nevadense, 70
Long-term effects of a 1969 fire and three 2,4,5-T treatments on *Prosopis glandulosa* in Mitchell Co., Texas, Guy R. McPherson, Carlton M. Britton, and Henry A. Wright, 235–237
Long-term heavy-grazing effects on soil and vegetation in the Four Corners region, Apollo B. Orodho, M. J. Trlica, and C. D. Bonham, 9–14
Loranthaceae, 72
Loring, Steven J., see MacKay, William P., —
Lotus
grandiflorus, 18
greenei, 72
humistratus, 72
oroboides, 72
scoparius, 18
Loxocemus bicolor, 278
Lupinus
albifrons, 18
arboreus, 15, 18, 20
brevicaulis, 67, 72
concinnus, 72
hirsutissimus, 18
palmeri, 66, 72
sparsiflorus, 64, 72
truncatus, 18
Lutjanidae, 45
Lutjanus, 45
Lycium
andersonii, 64, 74
californicum, 28
exsertum, 67, 74
pallidum, 74
Lycopersicon esculentum, 19
Lycurus phleoides, 67, 74
Lygaeidae, 156
Lyons, John, and Sonia Navarro-Perez, Fishes of the Sierra de Manantlan, west-central Mexico, 32–46
Lythraceae, 72
Lythrum californicum, 72

Mabuya unimarginata, 278
Macdonaldius andersoni, 458–460
Machaeranthera
gracilis, 70
pinnatifida, 70
tagetina, 64, 70
tephrodes, 66, 70
Machaonia coulteri, 231, 234
MacKay, William P., Steven J. Loring,

Thomas M. Frost, and Walter G. Whitford, Population dynamics of a playa community in the Chihuahuan Desert, 393–402
Macrobiotus
echinogenitus, 302
harmsworthi, 302, 303
hufelandi, 302–304
intermedius, 302
islandicus, 302
richtersi, 303
Macrobranchium, 37
Macroptilium gibbosifolium, 72
Macrosiphonia brachysiphon, 64, 70
Macrotus waterhousii, 232
Malacothrix
californica, 64, 70
clevelandii, 65, 70
fendleri, 70
foliosa, 18
Malpighiaceae, 72
Malvaceae, 64, 72
Mammals from a Holocene sequence in central Texas and their paleoenvironmental implications, small, Alisa J. Winkler, 199–205
Mammals from the state of Querétaro, Mexico, noteworthy records of, Livia León-Paniagua, Esther Romo-Vázquez, Juan Carlos Morales, David J. Schmidly, and Daniel Navarro-López, 231–234
Mammillaria
grahamii, 71
gummifera, 71
heyderi, 71
microcarpa, 67, 71
Mammut, 107
Mammuthus, 107
Manihot angustiloba, 66, 72
Manning, Richard W., see Jones, J. Knox, Jr., —
Manolepis putnami, 271
Marah gilensis, 66, 71
Margaranthus solanaceus, 74
Marina calycosa, 64, 72
Marrubium vulgare, 18, 72
Martyniaceae, 73
Masticophis
flagellum, 474
mentovarius, 274, 278
Mastotermes darwiniensis, 287
Matthews, William J., and Frances P. Gelwick, Fishes of Crutcho Creek and the North Canadian River in central Oklahoma: effects of urbanization, 403–410
Maurandya antirrhiniflora, 73
Mazama
americana, 4, 234
gouazoubira, 4
McAlpine, Susan, Continued decline of elk populations within Guadalupe Mountains National Park, Texas, 362–363
McAuliffe, Joseph R., Paloverdes, pocket mice, and bruchid beetles: interrelationships of seeds, dispersers, and seed predators, 329–337
McDaniel, V. Rick, see Saugey, David A., —
McLaughlin, Steven P., and Janice E. Bowers, A floristic analysis and checklist for the northern Santa Rita Mountains, Pima Co., Arizona, 61–75
McMillan, Eben, see Holland, Dan C., —
McPherson, Guy R., Carlton M. Britton, and Henry A. Wright, Long-term effects of a 1969 fire and three 2,4,5-T treatments on *Prosopis glandulosa* in Mitchell Co., Texas, 235–237
Medicago sativa, 18, 323
Megarcys signata, 133
Megetra cancellata, 369
Mehlhop-Cifelli, Patricia, see Moss, Susan P., —
Melampodium
leucanthum, 67, 70
longicorne, 64, 70
sericeum, 70
strigosum, 70
Meleagris gallopavo, 23–27
Melilotus
albus, 72
indicus, 72
Meloidae, 369
Menidia beryllina, 406
Menodora scabra, 73
Mentha spicata, 436
Mentzelia
albicaulis, 67, 72
asperula, 72
multiflora, 65, 72
Mephitis
macroura, 234
mephitis, 226
Mercado R., Pedro, see Palomino H., Guadalupe, —
Mercado-Morales, David, New record of *Reithrodontomys megalotis megalotis* and recent record of *R. m. saturatus* (Rodentia) in Nuevo Leon, Mexico, 366–367
Mergus merganser, 88–89
Meringis
agilis, 112, 113
arachnis, 111
Mesaspis moreleti, 275
Microfilaria *Piratuba mitchelli* (Smith) (Onchocercidae) from the Gila monster, *Heloderma suspectum* Cope (Helodermatidae), redescription of the, Stephen R. Goldberg and Charles R. Bursey, 458–460
Microfilaria stahnkei, 458
Microgeographic genetic variation in creole (*Etheostoma collettei*) and redfin (*Etheostoma whipplei*) darters (Percidae) in central Arkansas, Alvan A. Karlin and John D. Rickett, 135–145
Micronycteris megalotis, 152
Micropterus, 346
punctulatus, 347
salmoides, 87, 179, 347, 406, 407
Microseris
lindleyi, 70
linearifolia, 70
Microsteris gracilis, 73
Microtus
ochrogaster, 105, 107–109, 169, 199, 203
pennsylvanicus, 105, 107–109
pinetorum, 199, 203
quasiater, 233
Micrurus
browni, 278
fulvius, 474
nuchalis, 271
Milla biflora, 66, 74
Millipeds *Thrinaxoria lampra* (Chamberlin) and *Stenodesmus tuobitus* (Chamberlin) in eastern and southern Texas (Polydesmida: Xystodesmidae), occurrences of the, Rowland M. Shelley, 96–97
Milnesium tardigradum, 302, 303
Mimon cozumelae, 152
Mimosa
biuncifera, 66, 72, 381
borealis, 80, 81
dysocarpa, 72
Mimosestes limbatus, 334
Mimulus
guttatus, 73
longiflores, 19
Minckley, W. L., see Vives, Stephen P., —
Mirabilis
jalapa, 78
linearis, 65, 73
longiflora, 73
oblongifolia, 73
Mitchell, Sandra, see Woodward, Bruce Douglas, —
Mode of reproduction in the smallmouth salamander, *Ambystoma texanum* (Ambystomatidae), in Iowa, Jeffrey D. Camper, 99–100
Moina wierzejskii, 393, 394, 396–398, 400, 401
Mollugo verticillata, 70
Molossidae, 151–157
Molossus
ater, 151–153, 155, 157
sinaloae, 151–153, 157
Monarda
austromontana, 72
citriodora, 72

fruticulosa, 386, 390
Monocotyledoneae, 64
Monomorium minimum, 416–421
Moore, Dwight W., see Frey, Jennifer K., —
Moormops megalophylla, 152
Moraceae, 73
Morales, Juan Carlos, Description of a new species of *Jellisonia* Traub, 1944 (Siphonaptera: Ceratophyllidae) from Guerrero, México, 310–315
Morales, Juan Carlos, see Ayala-Barajas, Ricardo, —
Morales, Juan Carlos, see León-Paniagua, Livia, —
Mormoops megalophylla, 232
Morone chrysops, 406, 408
Morphologic variation in the Texas mouse, *Persomyscus attwateri*, Derrick W. Sugg, Michael L. Kennedy, and Gary A. Heidt, 163–172
Mortonia
scabrella, 71
sempervirens, 65, 71
Morus microphylla, 73
Moss, Susan P., and Patricia Mehlhop-Cifelli, Status of the Texas kangaroo rat, *Dipodomys elator* (Heteromyidae), in Oklahoma, 356–358
Moxostoma
austrinum, 34, 37, 38, 46
congestum, 446
Mugilidae, 34, 42
Muhlenbergia, 63
capillaris, 387, 390
dubioides, 64, 74
emersleyi, 67, 74
fragilis, 74
longiligula, 66, 74
monticola, 74
pauciflora, 74
porteri, 64, 74
rigens, 74
rigida, 74
sinuosa, 74
villiflora, 366
xerophila, 64, 74
Mullen, Gary R., see Trauth, Stanley E., —
Multivariate analyses of terrestrial reptilian distribution in Texas: an alternate view, Rocky Ward, Earl G. Zimmerman, and Timothy L. King, 441–445
Mus musculus, 366
Mustela frenata, 234
Mycoplasma, 26
Myosurus cupulatus, 73
Myotis
californicus, 354, 355
evotis, 354, 355
keaysi, 152
keenii, 341
leibii, 341, 354
lucifugus, 341
sodalis, 341–342
thysanodes, 354, 355
volans, 354
Myrtaceae, 19
Myxophyceae, 207

Nama
dichotomum, 72
hispidum, 72
Nanorchestidae, 280
Nasturtium officinale, 71
Nasua nasua, 233
Natalus stramineus, 152
Natural revegetation of an unreclaimed lignite surface mine in east-central Texas, J. G. Skousen, C. A. Call, and R. W. Knight, 434–440
Naucoridae, 253
Navarro-López, Daniel, see León-Paniagua, Livia, —
Navarro-Perez, Sonia, see Lyons, John, —
Navicula, 206
biconica, 209
mutica, 209
pygmaea, 209
schroeteri, 209
tripunctata, 209
Neck, Raymond W., Differential freeze-related mortality in feral populations of introduced veronicellid slugs in extreme southern Texas, 94–95
Neck, Raymond W., New state record: *Antheraea polyphemus oculea* (Lepidoptera: Saturniidae) from Coahuila, Mexico, 463–464
Nemacladus glanduliferus, 64, 71
Nemoura
avicularis, 131
trispinosa, 131
Nemouridae, 131
Neolloydia intertexta, 71
Neoperla clymene, 132
Neotoma, 107, 108, 236
albigula, 80, 173–176, 202, 203, 233, 331, 334, 377, 380, 457
floridana, 173–176, 202, 203
goldmani, 233
lepida, 80
mexicana, 173–176
micropus, 80–82, 173–176, 202, 203
Neotoma micropus nests with various plant species in southwestern Oklahoma, association of, Monte Thies and William Caire, 80–82
Nepidae, 253
Nerodia, 115, 120, 442
erythrogaster, 474
fasciata, 474
Nesting Botteri's sparrow, *Aimophila botterii*, in southern Texas, a range extension for, Dawn K. Conway and Karen L. P. Benson, 348–349
Nesting common mergansers in Chihuahua, Mexico, Bryan T. Brown, 88–89
Nesting success of San Clemente sage sparrows, David W. Willey, 28–31
Nicotiana trigonophylla, 74
Nikirk, Neil J., see Tyus, Harold M., —
Nitzschia, 208
amphibia, 209
filiformis, 206, 209
linearis, 209
palea, 209
tropica, 209
Nocomis
asper, 211
leptocephalus, 211
Nolina
beldingii, 76
microcarpa, 66, 74
Norops
anisolepis, 275
biporcatus, 275
crassulus, 275
laeviventris, 273, 274, 278
sericeus, 278
Notemigonus crysoleucas, 406
Notholaena
cochisensis, 69
grayi, 69
limitanea, 69
sinuata, 65, 69
Notiosorex crawfordi, 107, 200
Notropis
albeolus, 213
atherionoides, 406
chrysocephalus, 211–215
cornutus, 212–214
emiliae, 213
lutrensis, 211
potteri, 211
proserpinus, 446
rubellus, 214
stramineus, 406–408
venustus, 350
zonatus, 213
Nucifraga columbiana, 150
Numenius phaeopus, 240
Nyctaginaceae, 73
Nycticorax violaceus, 240
Nyctinomops macrotis, 232
Nymphaea, 206

Odocoileus
hemionus, 1–8, 323
virginianus, 1–8
Odontacarus dentatus, 111, 113
Oenothera
caespitosa, 65, 73
hookeri, 19
primiveris, 73
speciosa, 436
Oleaceae, 73
Ololygon staufferi, 277
Onagraceae, 19, 73

Onchocercidae, 458–460
Oncorhynchus mykiss, 249
Onychomys, 199
leucogaster, 202, 456, 457
torridus, 456, 457
Opheodrys aestivus, 474
Ophisaurus attenuatus, 474
Opsopeodus emiliae, 453
Opuntia, 28, 231, 286
arbuscula, 71
bigelovii, 80, 381
chlorotica, 71
compressa, 437
cymochila, 80, 81
drummondi, 221
phaeacantha, 64, 71, 80, 81
spinosior, 64, 71
Orbatula, 281
Orchidaceae, 74
Oreochromis
aureus, 34, 35, 37, 43, 46
mossambica, 338
Oretga-Rubio, Alfredo, see Arriaga, Laura, —
Oribatula, 280
Orobanchaceae, 73
Orobanche
cooperi, 73
multiflora, 65, 73
Orodho, Apollo B., M. J. Trlica, and C. D. Bonham, Long-term heavy-grazing effects on soil and vegetation in the Four Corners region, 9–14
Orthocarpus purpurascens, 73
Oryzomys palustris, 199, 202
Oryzopsis hymenoides, 9, 335
Osteichthyes, 292–297
Ostrocerca albidipennis, 131
Oxalidaceae, 73
Oxalis
albicans, 73
alpina, 73
dillenii, 436
stricta, 73
Oxybelis
aeneus, 278
fulgidus, 278
Oxyopidae, 20

Pachydesmus clarus, 96
Palomino H., Guadalupe, Myrna Segura D., Robert Bye, and Pedro Mercado R., Cytogenetic distinction between *Teloxys* and *Chenopodium* (Chenopodiaceae), 351–353
Paloverdes, pocket mice, and bruchid beetles: interrelationships of seeds, dispersers, and seed predators, Joseph R. McAuliffe, 329–337
Panicum, 85, 394
arizonicum, 74
bulbosum, 67, 74
capillare, 74
coloratum, 349
hallii, 74
hirticaule, 74
miliaceum, 466
obtusum, 74
virgatum, 386, 387, 390
Papaveraceae, 73
Pappogeomys, 201
neglectus, 233
Paragnetina media, 132
Paragyractis, 253
Parietaria pensylvanica, 74
Parkinsonia aculeata, 72
Parthenium incanum, 65, 70
Parthenocissus
incerta, 74
incertus, 66
Paspalum, 434
dilatatum, 436, 439
monostachyum, 385–388, 390
plicatulum, 387, 390, 435, 436
plicatum, 159
setaceum, 387, 390, 436
Passalozetes, 280–282
Passiflora incarnata, 437
Patterns of use of man-made roosts by *Tadarida brasiliensis mexicana* in Texas, Russell K. Fraze and Kenneth T. Wilkins, 261–267
Peces de la Cuenca del Río de la Concepción, Sonora, México, y el estatus del charalito Sonorense, *Gila ditaenia*, una especie en amenaza de extinción, los, Dean A. Hendrickson y Lourdes Juárez Romero, 177–187
Pectis
filipes, 70
longipes, 70
prostrata, 65, 70
Pectocarya
platycarpa, 64, 65, 71
recurvata, 65, 71
Pedalia, 393, 398
Pedomys, 203
Pellaea
atropurpurea, 69
intermedia, 69
mucronata, 64, 69
truncata, 69
Pelobatidae, 399
Pennellia micrantha, 71
Penstemon
barbatus, 73
dasyphyllus, 65, 73
linarioides, 66, 73
parryi, 66, 73
superbus, 64, 73
Percichthyidae, 406
Percidae, 135–145, 407, 453
Percina
burtoni, 87
caprodes, 87–88
jenkinsi, 87
macrolepida, 87–88, 350
rex, 87
Perlesta placida, 131
Perlidae, 132
Perlinodes aurea, 133
Perlodidae, 132, 133
Perognathus, 454
amplus, 331, 335
flavus, 107, 111–114, 201, 202, 366
Peromyscus, 149, 202
attwateri, 54–60, 163–172, 371–373
boylii, 108, 164, 366
difficilis, 366
eremicus, 457
floridanus, 58
gossypinus, 168
leucopus, 54–60, 160, 168
maniculatus, 58, 86, 107, 168, 366, 457
megalops, 305, 308, 310, 313
melanophris, 314
polionotus, 58
thomasi, 305, 308
truei, 169, 314, 366
Persomyscus attwateri, 163–172
Petalostemon candidum, 72
Peterson, Chris L., see Taylor, Cindy L., —
Petrova arizonensis, 148
Phacelia
affinis, 65, 72
arizonica, 64, 72
bombycina, 64, 72
coerulea, 65, 72
distans, 72
Phalaris, 316
caroliniana, 436
Pharyndgon warneri, 216
Phaseolus
acutifolius, 72
ritensis, 72
Pheidole dentata, 416–421
Phenacobius mirabilis, 406, 407
Phillips, Sherman A., Jr., see Jones, Stanley, R., —
Philodendron bipinnatifidum, 358
Phoradendron
californicum, 72
juniperinum, 72
tomentosum, 72
villosum, 72
Phrynosoma
asio, 278
cornutum, 369, 377–379
modestum, 377–383
Phyllodactylus tuberculosus, 274, 278
Physalis
hederaefolia, 74
viscosa, 390
Phytolaccaceae, 73
Picea, 354
engelmanni, 464
Pimephales, 213, 453
promelas, 406, 407
vigilax, 211, 406
Pinaceae, 70
Pinnularia acrosphaeria, 209

Pinus
arizonica, 232
cembroides, 76, 233
discolor, 67, 70
edulis, 146–150, 279, 322–328
edulus, 105
flexibilis, 232
monophylla, 322, 326
palustris, 221
ponderosa, 279, 354, 367, 465
pseudostrobus, 366
taeda, 221, 472
teocote, 232, 366
Pipistrellus
hesperus, 232, 354
subflavus, 341
Piptochaetium fimbriatum, 74, 75
Piratuba mitchelli, 458–460
Pisces, 211–215, 338–340, 346–348
Pithecellobium ebano, 371
Pituophis
lineaticollis, 275
melanoleucus, 221–222
Pitymys, 203
Plagiobothrys
arizonicus, 65, 71
pringlei, 64, 71
Plantaginaceae, 19, 73
Plantago
aristata, 436
lanceolata, 19
patagonica, 73
virginica, 66, 73
Platanaceae, 73
Platania, Steven P., Reports and verified occurrence of logperches (*Percina caprodes* and *Percina macrolepida*) in Colorado, 87–88
Platanus, 232
wrightii, 73, 116
Plecotus
townsendi, 354
townsendii, 232
Plectrohyla
avia, 91–94
dasypus, 93
glandulosa, 93
guatemalensis, 93, 275
hartwegi, 91
ixil, 93
lacertosa, 91
matudae, 275
matudai, 91, 93
pokomchi, 93
pycnochila, 91
quecchi, 93
sagorum, 93
tecunumani, 93
Pleochaetis, 310
Pleochetoides bullisi, 310
Plethodon
caddoensis, 468–470
fourchensis, 468–470
larselli, 471
neomexicanus, 471
ouachitae, 468–470
serratus, 468–471
vehiculum, 471
websteri, 471
Pleuroloma flavipes, 96
Poa
bigelovii, 64, 75
fendleriana, 65, 75
sandbergii, 323
Poaceae, 19, 64, 74
Podmosta
delicatula, 131
obscura, 131
Poecilia
butleri, 34, 40, 41, 46
chica, 34, 37, 41, 46
sphenops, 41
Poeciliidae, 34, 35, 40–42, 45, 406
Poeciliopsis, 179, 185
baenschi, 34, 35, 37, 41, 42, 46
fasciata, 41
infans, 45
latidens, 41
monacha, 180
occidentalis, 180, 181
turneri, 34, 37, 42, 46
turribarensis, 45
Pogonomyrmex
badius, 477
barbatus, 477, 478
Poinsettia
dentata, 72
heterophylla, 72
radians, 72
Polanisia dodecandra, 66, 71
Polemoniaceae, 64, 73
Polyarthra, 393, 398
Polydesmida, 96–97
Polygala
alba, 73
barbeyana, 73
obscura, 73
Polygalaceae, 73
Polygonaceae, 19, 73
Polygonal breeding territories in a natural population (Pisces: Cyprinodontidae: *Cyprinodon*), Anthony A. Echelle, Alice F. Echelle, and D. Allen Rutherford, 338–340
Polygonum, 434, 436, 437
Polypogon monspeliensis, 75
Pomadasys bayanus, 45
Pomoxis, 346, 408
annularis, 347, 406
nigromaculatus, 87, 347, 406
Population dynamics of a playa community in the Chihuahuan Desert, William P. MacKay, Steven J. Loring, Thomas M. Frost, and Walter G. Whitford, 393–402
Populus
deltoides, 437
fremontii, 73, 116, 217, 218
tremuloides, 354, 464
Porophyllum
gracile, 70
ruderale, 66, 70
Porter, Sanford D., see Hook, Allan W., —
Portulaca
parvula, 73
retusa, 73
suffrutescens, 66, 73
umbraticola, 66, 73
Portulacaceae, 19, 73
Potomageton, 354
Potos flavus, 233
Predation on frogs in breeding choruses, Bruce Douglas Woodward and Sandra Mitchell, 449–450
Predation on yellow-eyed junco nestlings by twin-spotted rattlesnakes, Thomas C. Gumbart and Kimberly A. Sullivan, 367–368
Primulaceae, 73
Proboscidea parviflora, 73
Promops centralis, 151–153, 156, 157
Prosopis, 394
glandulosa, 229, 235–237, 316, 356, 371, 378, 380, 381, 385, 399, 411–415, 435, 437
juliflora, 80, 81, 335
velutina, 66, 72, 116
Prostoia
besametsa, 130–134
completa, 131
hallasi, 131
similis, 131
Prunus, 19
virginiana, 80, 81
Pseudacris crucifer, 449
Pseudechiniscus victor, 303
Pseudemys scripta, 206
Pseudobiotus augusti, 302
Pseudomonas nactus, 20
Pseudophallus starski, 45
Pseudophryne, 361
Psilostrophe cooperi, 70
Psoralea tenuiflora, 72
Ptelea trifoliata, 73
Pteridium, 367
Pteronotus
davyi, 152, 232
parnellii, 152
Ptychocheilus
grandis, 249–260
lucius, 196
oregonensis, 257
Ptychohyla
euthysanota, 275
schmidtorum, 275
Pylodictus olivaris, 406
Pyracantha koidzumii, 73

Quercus, 250, 472
arizonica, 66, 72
castanea, 232

devia, 76
emoryi, 66, 72
gambellii, 323
hypoleucoides, 67, 72
marilandica, 221
mexicana, 232
nigra, 437
oblongifolia, 72
pungens, 65, 72
rugosa, 232
rysophylla, 366
stellata, 435, 437
texana, 199
tuberculata, 76
turbinella, 18
virginia, 199
virginiana, 385

Rafinesquia neomexicana, 70, 71
Rana
berlandieri, 272
clamitans, 474
forreri, 272, 277
maculata, 275
pipiens, 271, 272
sphenocephala, 474
utricularia, 450
vaillanti, 277
yavapaiensis, 116–118, 120
Randia rhagocarpa, 371
Rangifer tarandus, 4
Ransom, Dean, Jr., see Glazener, W. C., —
Ranunculaceae, 73
Ratibida columnaris, 390
Rattus, 202
rattus, 58
Reestablishment of *Cyprinodon eximius* (Cyprinodontidae) and status of *Dionda diaboli* (Cyprinidae) in the vicinity of Dolan Creek, Val Verde Co., Texas, Clark Hubbs and Gary P. Garrett, 446–448
Reichling, Steven B., Reproductive traits of the Louisiana pine snake *Pituophis melanoleucus ruthveni* (Serpentes: Colubridae), 221–222
Reithrodontomys, 86, 310, 313, 314
fulvescens, 160, 202
megalotis, 366–367
montanus, 202
Reithrodontomys megalotis megalotis and recent record of *R. m. saturatus* (Rodentia) in Nuevo Leon, Mexico, new record of, David Mercado-Morales, 366–367
Remora, 206
Reproduction and embryonic development in *Syrrhophus cystignathoides campi* (Anura: Leptodactylidae), observations on, Louise A. Hayes-Odum, 358–361
Reproductive activity in an old-age coyote in southeastern Colorado, Eric M. Gese, 101–102
Reproductive notes on the eggs and offspring of *Tantilla gracilis* (Serpentes: Colubridae), with evidence of communal nesting, Vincent A. Cobb, 222–224
Reproductive patterns of five plethodontid salamanders from the Ouachita Mountains, Cindy L. Taylor, Robert F. Wilkinson, Jr., and Chris L. Peterson, 468–472
Reproductive traits of the Louisiana pine snake *Pituophis melanoleucus ruthveni* (Serpentes: Colubridae), Steven B. Reichling, 221–222
Resource collecting abilities of *Solenopsis invicta* (Hymenoptera: Formicidae) compared with those of three sympatric Texas ants, Stanley R. Jones and Sherman A. Phillips, Jr., 416–422
Reticulitermes flavipes, 287
Rhadinaea, 221
godmani, 275
Rhamnaceae, 73
Rhamnus californica, 67, 73
Rhinichthys, 453
osculus, 195, 250, 452
Rhinoclemmys rubida, 278
Rhinophrynus dorsalis, 277
Rhinotermitidae, 285–291
Rhizophora mangle, 237
Rhogeesa tumida, 152
Rhopalodia gibberula, 209
Rhus
choriophylla, 70
glabra, 70
toxicodendron, 437
trilobata, 65, 70
virens, 65, 70
Rhynchosia
americana, 388, 390
minima, 388–390
senna, 72
Rhynchosida physocalyx, 72
Rhynchospora, 388, 390
Rhysodesmus
chisosi, 96
texicolens, 96
Rickett, John D., see Karlin, Alvan A., —
Rivina humilis, 73
Robbins, Lynn W., see Schnake-Greene, Janice E., —
Robel, Robert J., see Shuman, Theresa W., —
Robinia neomexicana, 72
Rodentia, 366–367, 371–373, 454–455
Rodriquez-Estrella, Ricardo, see Arriaga, Laura, —
Romero, Lourdes Juárez, see Hendrickson, Dean A., —
Romero-Almaraz, Ma. de Lourdes, see Sánchez-Hernández, Cornelio, —
Romo-Vázquez, Esther, see León-Paniagua, Livia, —
Rongstad, Orrin J., see Glazener, W. C., —
Rorripa acuaticum, 181
Rosa bracteata, 229
Rosaceae, 19, 73
Rubiaceae, 73
Rubus trivialis, 437
Rudbeckia serotina, 436
Rudolph, D. Craig, and James G. Dickson, Streamside zone width and amphibian and reptile abundance, 472–476
Rumex, 434
acetosella, 436
angiocarpus, 19
crispus, 73
Rutaceae, 64, 73
Rutherford, D. Allen, see Echelle, Anthony A., —

Sageretia wrightii, 66, 73
Salazar, Mario, see Walkowiak, Alain M., —
Salicaceae, 73
Salix, 250
exigua, 73
gooddingii, 64, 73, 116
nigra, 437
Salsola kali, 71
Salvadora lemniscata, 278
Salvia
columbariae, 64, 72
subincisa, 72
Sambucus
mexicana, 71
mexicanus, 65
Sánchez-Hernández, Cornelio, Ma. de Lourdes Romero-Almaraz, y Marcela Aguilar-Morales, Anatomía e histológia de la cápsula del murciélago blanco *Diclidurus albus virgo* Thomas, 241–244
Santalaceae, 73
Sanvitalia abertii, 67, 71
Sapindaceae, 73
Sapindus saponaria, 73
Sarasinula plebeia, 94, 95
Sarcophygid fly infestations of *Sceloporus undulatus* (Sauria: Iguanidae) egg clutches in Arkansas, additional observations on, Stanley E. Trauth and Gary R. Mullen, 97–98
Sarcostemma
crispum, 70
cynanchoides, 70
Saturniidae, 463–464
Saugey, David A., Gary A. Heidt, Darrell R. Heath, and V. Rick McDaniel, Hibernating Indiana bats (*Myotis sodalis*) from the Ouachita

Mountains of southeastern Oklahoma, 341–342
Sauria, 97–98, 215–217
Saxifragaceae, 73
Scaled antpitta, *Grallaria guatimalensis*, in Mexico, the, Robert W. Dickerman, 460–463
Scaphiodontophis annulatus, 278
Scaphiopus, 394, 400, 401
hammondi, 399
multiplicatus, 393, 399, 449
Scarabidae, 156
Sceloporus, 274, 367
carinatus, 274, 278
magister, 377–383
melanorhinus, 278
occidentalis, 15, 20, 21
siniferus, 278
undulatus, 97–98, 377–379, 474
variabilis, 278
Scheelea zonensis, 336
Schistophragma intermedia, 66, 73
Schizachrium scoparium, 435
Schizachyrium
cirratum, 75
hirtiflorum, 75
scoparium, 159, 385, 387, 388, 390, 413, 436
Schkuhria wislizenii, 65, 71
Schmidly, David J., see León-Paniagua, Livia, —
Schmidly, David J., see Smith, Tracy S., —
Schnake-Greene, Janice E., Lynn W. Robbins, and Deanna K. Tolliver, A comparison of genetic differentiation among populations of two species of mice (*Peromyscus*), 54–60
Sciaendae, 406
Scincella lateralis, 473, 474
Scindapsus aureus, 359
Scirpus, 250, 354
Sciuridae, 201
Sciurus, 472
carolinensis, 201
deppei, 233
niger, 201
Scleropogon breviflorus, 75
Scolopacidae, 237–240
Scorpiones, 47–53
Scotinomys, 310, 314
Scribner, Kim T., see Smith, Michael H., —
Scrophulariaceae, 19, 64, 73
Scutellaria muriculata, 390
Seasonal occurrence and habitat utilization by lizards in southwestern New Mexico, William H. Baltosser and Troy L. Best, 377–384
Sedum griffithsii, 64, 71
Segura D., Myrna, see Palomino H., Guadalupe, —
Selaginella rupincola, 69
Selaginellaceae, 69
Senecio
douglasii, 64, 71
neomexicanus, 65, 71
vulgaris, 18
Senna
bauhinioides, 72
hirsuta, 72
Senticolis triaspis, 278
Serpentes, 115–122, 221–222, 222–224
Setaria
grisebachii, 75
macrostachya, 75
Shell closure on water loss in the Sonoran mud turtle, *Kinosternon sonoriense*, effects of, Mark L. Wygoda and Cynthia M. Chmura, 228–229
Shelley, Rowland M., Occurrences of the millipeds *Thrinaxoria lampra* (Chamberlin) and *Stenodesmus tuobitus* (Chamberlin) in eastern and southern Texas (Polydesmida: Xystodesmidae), 96–97
Shipley, Michael M., Frederick B. Stangl, Jr., Rodney L. Cate, and Craig S. Hood, Immunoelectrophoretic relationships among four species of woodrats (Cricetidae: *Neotoma*), 173–176
Shipsa rotunda, 131
Shrews in New Mexico, unusual records of, Sarah B. George, 464–465
Shuman, Theresa W., Robert J. Robel, John L. Zimmerman, and Arthur D. Dayton, Influence of handling time and metabolizable energy on seed selection by four emberizids, 466–468
Sibon
fasciata, 278
fisheri, 275
Sicydium
gymnogaster, 44
multipunctatum, 34, 37, 38, 43, 44, 46
Sida
neomexicana, 72, 73
procumbens, 73
spinosa, 73
Sigmodon, 310, 314
hispidus, 105, 108, 160, 202, 366, 457
Signodon, 236
Silene
antirrhina, 64, 71
laciniata, 71
Silybum, 18
Simon, Thomas P., and Nancy J. Garcia, Description of eggs, larvae, and early juveniles of the stripped darter, *Etheostoma punctulatum* (Agassiz), from a tributary of the Osage River, Missouri, 123–129
Siphlonuridae, 253
Siphonaptera, 305–309, 310–315
Sissom, W. David, Systematics of *Vaejovis dugesi* Pocock, with descriptions of two new related species (Scorpiones, Vaejovidae), 47–53
Sisymbrium irio, 71
Sitanion hystrix, 67, 75
Skousen, J. G., C. A. Call, and R. W. Knight, Natural revegetation of an unreclaimed lignite surface mine in east-central Texas, 434–440
Skwala
curvata, 133
parallela, 130–134
Smilax bona-nox, 435, 437
Smilisca baudinii, 277
Sminthuridae, 280
Smith, Michael H., Kim T. Scribner, Len H. Carpenter, and Robert A. Garrott, Genetic characteristics of Colorado mule deer (*Odocoileus hemionus*) and comparisons with other cervids, 1–8
Smith, Steven A., see Smith, Tracy S., —
Smith, Tracy S., Steven A. Smith, and David J. Schmidly, Impact of fire ant (*Solenopsis invicta*) density on northern pygmy mice (*Baiomys taylori*), 158–162
Soil microarthropod fauna of four habitats of the Rio Puerco watershed, New Mexico, Y. Steinberger, Earl F. Aldon, and W. G. Whitford, 279–284
Solana, Elena, see Walkowiak, Alain M., —
Solanaceae, 19, 73
Solanum
cornutum, 74
douglasii, 74
elaeagnifolium, 74
rostratum, 74
Soleidae, 45
Solenopsis invicta, 158–162, 416–422, 477–478
Solidago
californica, 18
sparsiflora, 65, 71
Sonchus, 436
oleraceus, 18
Sorex
cinereus, 200
haydeni, 84–86
merriami, 464, 465
nanus, 464, 465
palustris, 107
Sorghastrum nutans, 55, 387, 390
Sorghum
halepense, 75, 436
vulgare, 466
Soricidae, 200
Soyedina
interrupta, 131
producta, 131
vallicularia, 131
Sparganium, 354
Spartina spartinae, 385

Spawning and movements of razorback sucker, *Xyrauchen texanus*, in the Green River basin of Colorado and Utah, Harold M. Tyus and Catherine A. Karp, 427–433
Species dominance in two river populations of sunfishes (Pisces: Centrarchidae): 1966 to 1988, Gerald E. Gunning and Royal D. Suttkus, 346–348
Speleorchestes, 282
Spermolepis echinata, 70
Spermophilus
franklinii, 107
lateralis, 149
mexicanus, 201
spilosoma, 201
tereticaudus, 334
teriticaudus, 331
tridecemlineatus, 201
variegatus, 149, 201
Sphaeralcea
angustifolia, 73
laxa, 73
Sphaerodactylus glaucus, 278
Sphenomorphus
assatus, 273, 278
incertus, 275
Sphenopholis obtusata, 65, 75
Spilogale putorius, 234
Spinacia oleracea, 353
Spizella arborea, 466
Splendidofilaria corophila, 458, 459
Sporobolus
contractus, 75
cryptandrus, 390
neglectus, 55
wrightii, 75
Spotted sunfish, *Lepomis punctatus*, in the Devils River, Texas, occurrence of the, Melvin L. Warren, Jr., 349–351
Spyridia filamentosa, 239
Stachys coccinea, 72
Stangl, Frederick B., Jr., and John V. Grimes, Supernumerary hind foot on a specimen of the Texas mouse, *Peromyscus attwateri* (Rodentia: Cricetidae), 371–373
Stangl, Frederick B., Jr., see Dalquest, Walter W., —
Stangl, Frederick B., Jr., see Shipley, Michael M., —
Stator limbatus, 334
Steinberger, Y., Earl F. Aldon, and W. G. Whitford, Soil microarthropod fauna of four habitats of the Rio Puerco watershed, New Mexico, 279–284
Stenodesmus tuobitus, 96–97
Stenorrhina freminvillii, 274, 278
Stephanomeria
pauciflora, 71
thurberi, 71
Stevens, Richard, see Van Pelt, Nicholas S., —
Stevia lemmoni, 71
Stewart, Kenneth W., see Hassage, Rodney L., —
Stipa
comata, 28
leucotricha, 435, 436
Stizostedion vitreum, 87
Storeria dekayi, 474
Stratiomyidae, 253
Streamside zone width and amphibian and reptile abundance, D. Craig Rudolph and James G. Dickson, 472–476
Streptanthus arizonicus, 71
Streptocephalus texanus, 393–396, 399, 401
Strix varia, 449
Sturnira lilium, 152, 232
Sugg, Derrick W., Michael L. Kennedy, and Gary A. Heidt, Morphologic variation in the Texas mouse, *Persomyscus attwateri*, 163–172
Sullivan, Kimberly A., see Gumbart, Thomas C., —
Summer movement and mass mortality in the California tiger salamander (*Ambystoma californiense*), late, Dan C. Holland, Marc P. Hayes, and Eben McMillan, 217–220
Supernumerary hind foot on a specimen of the Texas mouse, *Peromyscus attwateri* (Rodentia: Cricetidae), Frederick B. Stangl, Jr., and John V. Grimes, 371–373
Survival and growth of immature *Juniperus osteosperma* and *Pinus edulis* following woodland chaining in central Utah, Nicholas S. Van Pelt, Richard Stevens, and Neil E. West, 322–328
Suttkus, Royal D., see Gunning, Gerald E., —
Sweltsa
mediana, 132
onkos, 132
Sygnathidae, 45
Sylvilagus, 107, 108, 199, 236
aquaticus, 200, 201
audubonii, 200
floridanus, 158, 200
Symphimus leucostomus, 271
Symphoricarpus orbiculatus, 437
Synedra
acus, 209
rumpens, 209
ulna, 209
Syrrhophus
cystignathoides, 358–361
marnocki, 359
pipilans, 277
Systematics of *Vaejovis dugesi* Pocock, with descriptions of two new related species (Scorpiones, Vaejovidae), W. David Sissom, 47–53

Tadarida
brasiliensis, 232, 261–267, 342, 354
laticaudata, 151–154, 156
Taeniopoda eques, 455–458
Tagelus affinis, 239
Talinum
aurantiacum, 73
paniculatum, 67, 73
Tamias quadrivittatus, 107
Tantilla, 221
gracilis, 222–224
rubra, 278
Tantillita brevissima, 271
Taraxacum officinale, 436
Tardigrada from Gunnison Co., Colorado, with the description of a new species of *Diphascon*, Clark W. Beasley, 302–304
Tarsonemidae, 280
Taxonomic status of the Pleistocene ringtail *Bassariscus sonoitensis* (Carnivora), Arthur H. Harris, 343–346
Taylor, Cindy L., Robert F. Wilkinson, Jr., and Chris L. Peterson, Reproductive patterns of five plethodontid salamanders from the Ouachita Mountains, 468–472
Tecoma stans, 71
Teiidae, 215–217
Teloxys
ambrosioides, 351, 352
graveolens, 351
Temperature and sucrose composition of floral nectars in *Ipomopsis longiflora* under field conditions, C. Edward Freeman and Kathleen C. Head, 423–426
Tephrosia tenella, 66, 72
Terrapene, 442
carolina, 474
Tetraclea coulteri, 65, 74
Tetramerium hispidum, 66, 70
Texas kangaroo rat, *Dipodomys elator* (Heteromyidae), in Oklahoma, status of the, Susan P. Moss and Patricia Mehlhop-Cifelli, 356–358
Thalictrum fendleri, 65, 73
Thamnocephalus platyurus, 393–396, 399
Thamnophis, 442
cyrtopsis, 115–122, 275
elegans, 120
fulvus, 275
marcianus, 449
proximus, 120, 278, 474
rufipunctatus, 120
sirtalis, 121
Thamnosma texana, 73
Thelesperma
longipes, 65, 71
megapotamicum, 71
nuesense, 390

Thelypodiopsis linearifolia, 66, 71
Thies, Monte, and William Caire, Association of *Neotoma micropus* nests with various plant species in southwestern Oklahoma, 80–82
Thlaspi montanum, 71
Thomas, Howard H., John O. Whitaker, Jr., and Troy L. Best, Ectoparasites of *Dipodomys elator* from north-central Texas with some data from sympatric *Chaetodipus hispidus* and *Perognathus flavus*, 111–114
Thomomys, 58, 201
  bottae, 105, 107, 108
  umbrinus, 204
Thrinaxoria
  bifida, 96
  lampra, 96–97
Thysanocarpus
  curvipes, 71
  elegans, 65, 71
Tiaroga cobitis, 451–454
Tidestromia lanuginosa, 70
Tilapia, 179, 338
  aurea, 406–408
  rendalli, 34, 35, 43, 46
Tithonia thurberi, 66, 71
Tolliver, Deanna K., see Schnake-Greene, Janice E., —
Toxicodendron radicans, 65, 70
Trachelo spermum, 358
Trachypogon secundus, 75, 387, 390
Tradescantia
  occidentalis, 74
  pinetorum, 74
Tragia
  laciniata, 64, 72
  nepetaefolia, 67, 72
  ramosa, 72
Tragus berteronianus, 75
Trauth, Stanley E., and Gary R. Mullen, Additional observations on sarcophygid fly infestations of *Sceloporus undulatus* (Sauria: Iguanidae) egg clutches in Arkansas, 97–98
Trianthema portulacastrum, 70
Tribulus terrestris, 74
Trichachne californica, 74
Trichiurus elatoris, 111
Trichoneura elegans, 388, 390
Trichopoda pennipes, 20
Trichopsylla ironsi, 310
Trichostema arizonicum, 66, 72
Tricorythidae, 253
Tridens muticus, 64, 75
Trimorphodon biscutatus, 274, 278
Trinectes fonsecensis, 45, 46
Triodanis
  holzingeri, 71
  perfoliata, 71
Triops longicaudatus, 393–395, 399, 400
Trisetum interruptum, 66, 75
Trixis californica, 71
Triznaka signata, 130–134
Trlica, M. J., see Orodho, Apollo B., —
Trochilidae, 76
Trombiculidae, 113
Tydeidae, 280
Tyler, Jack D., A xanthochroistic gar in Oklahoma, 225
Typha, 186, 250
  domingensis, 64, 75
Typhaceae, 75
Tyus, Harold M., and Catherine A. Karp, Spawning and movements of razorback sucker, *Xyrauchen texanus*, in the Green River basin of Colorado and Utah, 427–433
Tyus, Harold M., and Neil J. Nikirk, Abundance, growth, and diet of channel catfish, *Ictalurus punctatus*, in the Green and Yampa rivers, Colorado and Utah, 188–198

Uca
  crenulata, 239
  princeps, 239
Ulmaceae, 74
Ulmus alata, 435, 437
Urocyon littoralis, 30
Urosaurus
  bicarinatus, 278
  ornatus, 377–383
Urticaceae, 74
Uta stansburiana, 15, 20, 21, 377–384
Utricularia vulgaris, 354

Vaejovidae, 47–53
Vaejovis
  chisos, 48–51
  dugesi, 47–53
  granulatus, 47
  mexicanus, 47, 49, 53
  nitidulus, 47
  sprousei, 48, 51, 52
Van Auken, O. W., and J. K. Bush, Importance of grass density and time of planting on *Prosopis glandulosa* seedling growth, 411–415
Van Auken, O. W., and J. K. Bush, Interaction of two C⅜ and C½ grasses with seedlings of *Acacia smallii* and *Celtis laevigata*, 316–321
Van Pelt, Nicholas S., Richard Stevens, and Neil E. West, Survival and growth of immature *Juniperus osteosperma* and *Pinus edulis* following woodland chaining in central Utah, 322–328
Vauquelinia californica, 73
Verbena
  gracilis, 74
  halei, 436
  neomexicana, 74
Verbenaceae, 74
Verbesina
  encelioides, 71
  rothrockii, 71
Veronica
  anagallis-aquatica, 73
  peregrina, 67, 73
Vicia ludoviciana, 72
Viguiera
  annua, 66, 71
  cordifolia, 71
  dentata, 71
  multiflora, 71
Violaceae, 74
Visoka cataractae, 131
Vitaceae, 74
Vitis arizonica, 67, 74
Vitus mustangensis, 437
Vives, Stephen P., and W. L. Minckley, Autumn spawning and other reproductive notes on loach minnow, a threatened cyprinid fish of the American Southwest, 451–454
Vorticella, 210
Vulpia octoflora, 64, 75, 436

Walker, James M., and James E. Cordes, Whiptail lizards (genus *Cnemidophorus*) on ersatz substrates in southern Texas, 89–91
Walkowiak, Alain M., Mario Salazar, y Elena Solana, Distribucion espacial en arbustos de desierto: el caso de *Fouquieria splendens*, 363–365
Ward, Rocky, Earl G. Zimmerman, and Timothy L. King, Multivariate analyses of terrestrial reptilian distribution in Texas: an alternate view, 441–445
Warren, Melvin L., Jr., Occurrence of the spotted sunfish, *Lepomis punctatus*, in the Devils River, Texas, 349–351
West, Neil E., see Van Pelt, Nicholas S., —
Whiptail lizards (genus *Cnemidophorus*) on ersatz substrates in southern Texas, James M. Walker and James E. Cordes, 89–91
Whistling posts used by northern bobwhites (*Colinus virginianus*), attributes of, David B. Johnson, Fred S. Guthery, and Arlo H. Kane, 229–231
Whitaker, John O., Jr., see Thomas, Howard H., —
White, J. Allen, and Clait E. Braun, Growth of young band-tailed pigeons in captivity, 82–84
Whitford, W. G., see Steinberger, Y., —
Whitford, Walter G., see MacKay, William P., —
Wiemeyer, Stanley N., see Grubb, Teryl G., —
Wilkins, Kenneth T., see Fraze, Russell K., —
Wilkinson, Robert F., Jr., see Taylor, Cindy L., —

Willey, David W., Nesting success of San Clemente sage sparrows, 28–31
Willis, Kevin B., see Gannon, Michael R., —
Winemiller, Kirk O., and Barbara M. Winsborough, Occurrence of epizoic communities on the parasitic copepod *Lernaea carassii* (Lernaeidae), 206–210
Winkler, Alisa J., Small mammals from a Holocene sequence in central Texas and their paleoenvironmental implications, 199–205
Winsborough, Barbara M., see Winemiller, Kirk O., —
Woodsia mexicana, 69
Woodward, Bruce Douglas, and Sandra Mitchell, Predation on frogs in breeding choruses, 449–450
Wright, Henry A., see McPherson, Guy R., —
Wygoda, Mark L., and Cynthia M. Chmura, Effects of shell closure on water loss in the Sonoran mud turtle, *Kinosternon sonoriense*, 228–229

Xanthium strumarium, 71
Xanthocephalum dracunculoides, 80, 81, 235
Xanthochroistic gar in Oklahoma, a, Jack D. Tyler, 225
Xantusiidae, 374
Xenodon rabdocephalus, 274, 278
Xenotaenia, 36
  resolanae, 34, 35, 37, 38, 40, 46
Xyrauchen texanus, 196, 427–433
Xystodesmidae, 96–97

Yabea microcarpa, 67, 70
Yucca
  dicipiens, 231
  elata, 74
  filifera, 366
  glauca, 80, 81
  louisianensis, 221
  schottii, 64, 74
  thornberi, 64, 74

Zanthoxylum fagara, 229, 349, 371
Zapada
  cinctipes, 131
  columbiana, 131
  haysi, 131
Zapus hudsonius, 86
Zea
  diploperennis, 32
  mays, 32
Zephyranthes longifolia, 74
Zexmenia podocephala, 66, 71
Zimmerman, Earl G., see Ward, Rocky, —
Zimmerman, John L., see Shuman, Theresa W., —
Zimmerman, John W., Burrow characteristics of the nine-banded armadillo, *Dasypus novemcinctus*, 226–227
Zinnia acerosa, 65, 71, 378, 380, 381
Ziziphus obtusifolia, 73, 349
Zoch, Patricia K., see Gold, John R., —
Zonotrichia querula, 466
Zoogeographic implications of Holocene mammal remains from ancient beaver ponds in Oklahoma and New Mexico, Walter W. Dalquest, Frederick B. Stangl, Jr., and M. John Kocurko, 105–110
Zornia bracteata, 390
Zygophyllaceae, 74